AMENDMENTS TO THE CLAIMS

Please amend claims 1, 8-10, 33, 38, 39, 43 and 45-47.

Please cancel claims 7, 13-32, 37, 42, 44 and 48 without prejudice.

1. (Currently Amended) A power allocation method for providing a packet data service with a line service in a mobile communication system having a base transceiver station for performing wireless communication with at least one mobile station and a base station controller for controlling the base transceiver station, the method comprising the steps of:

(a) checking whether or not packet data traffic is generated;

(b) if it is checked and the packet data traffic is generated in the step (a), checking whether or not there is the mobile station making use of the line service where a current call is in progress;

(c) if it is checked and there is the mobile station making use of the line service where the current call is in progress, checking whether or not there is the mobile station making use of the packet data service where the call is currently in progress; and

(d) if new packet data traffic is generated after it is checked ~~and~~ that there is no mobile station making use of the packet data service where the current call is in progress, gradually increasing power transmitted at each slot time for a period of time to ~~the~~ a mobile station ~~making use of the packet data service~~ which generates the new packet data traffic which it takes a signal-to-interference ratio of the mobile station to be restored to an original value thereof when the power allocated to the mobile station making use of the line service is changed, wherein the increasing power is in a remaining power other than a power allocated to the line service.

2. (Original) The power allocation method as claimed in claim 1, wherein the packet data traffic in the step (a) is generated when the mobile station performs packet data communication including at least one of a wireless application protocol (WAP), a file transfer protocol (FTP) and a hypertext transfer protocol (HTTP).

3. (Original) The power allocation method as claimed in claim 1, further comprising the step of, if it is checked that there is no mobile station making use of the line service where the

current call is in progress in the step (b), allocating current whole power to the mobile station making use of the packet data service.

4. (Original) The power allocation method as claimed in claim 1, further comprising the step of, if it is checked and there is the mobile station making use of the packet data service where the current call is in progress in the step (c), allocating current whole power to the mobile station making use of the packet data service.

5. (Original) The power allocation method as claimed in claim 3, wherein the step of allocating the power to the mobile station making use of the packet data service allocates current remaining power to the mobile station making use of the packet data service at once.

6. (Original) The power allocation method as claimed in claim 4, wherein the step of allocating the power to the mobile station making use of the packet data service allocates current remaining power to the mobile station making use of the packet data service at once.

7. (Canceled)

8. (Currently Amended) The power allocation method as claimed in claim ~~7~~1, wherein the ~~preset period of~~each slot time is 1.25 msec.

9. (Currently Amended) The power allocation method as claimed in claim ~~7~~1, wherein the power allocation gradually increases the power transmitted to the mobile station making use of the packet data service by a same preset power magnitude at each ~~preset period of~~ slot time.

10. (Currently Amended) The power allocation method as claimed in claim ~~7~~1, wherein the power allocation controls the power transmitted to the mobile station making use of the packet data service to be gradually increased at each ~~preset period of~~slot time in a way that an increasing width of each step is gradually decreased as the period of time proceeds.

11. (Original) The power allocation method as claimed in claim 9, wherein the gradually increasing power is increased up to a peak power which can be currently transmitted.

12. (Original) The power allocation method as claimed in claim 10, wherein the gradually increasing power is increased up to a peak power which can be currently transmitted.

13-32. (Canceled)

33. (Currently Amended) A power allocation apparatus for providing a packet data service with a line service in a mobile communication system over a mobile communication network having a base transceiver station for performing wireless communication with at least one mobile station, and a base station controller connected to a mobile switching center and for controlling the base transceiver station, the power allocation apparatus comprising:

the base transceiver station including an antenna for performing wireless communication with the mobile station; a transmission section for performing wireless transmission by means of the antenna;

a reception section for performing wireless reception by means of the antenna;

a data reception section for receiving data to be transmitted from the mobile communication network to the mobile station;

a data processing section for processing the data received through the data reception section in accordance with a predetermined algorithm;

a modulation section for modulating the data processed by the data processing section;

a power section for supplying/driving power to allow the data modulated by the modulation section to be transmitted through the antenna; and

a control section for checking whether or not there is the mobile station making use of the packet data service, and according to the checked result, controlling the power section to gradually regulate the power transmitted to the mobile station making use of the packet data service, wherein the gradually regulated power is in a remaining power other than a power allocated to the line service, and

if new packet data traffic is generated after it is checked that there is no mobile station making use of the packet data service where the current call is in progress, the control section controls the power section to gradually increase power transmitted at each slot time for a period

of time to a mobile station which generates the new packet data traffic which it takes a signal-to-interference ratio of the mobile station to be restored to an original value thereof when the power allocated to the mobile station making use of the line service is changed.

34. (Original) The power allocation apparatus as claimed in claim 33, wherein the control section is provided to the base transceiver station.

35. (Original) The power allocation apparatus as claimed in claim 33, wherein the control section is provided to the base station controller.

36. (Original) The power allocation apparatus as claimed in claim 33, wherein the control section comprises: a packet scheduler for receiving data transmitted from the mobile communication network to perform packet scheduling; a channel estimator for estimating channels according to signals received through the reception section; a channel allocator for allocating communication channels; a power allocator for controlling the power section to allocate transmission power; and a coding and modulating selector for performing coding and modulating of the data.

37. (Canceled)

38. (Currently Amended) The power allocation apparatus as claimed in claim ~~37~~33, wherein the control section controls the power section to allocate current whole power to the mobile station making use of the packet data service, in the case where there is no mobile station making use of the line service where the current call is in progress when the packet data traffic is generated for the first time.

39. (Currently Amended) The power allocation apparatus as claimed in claim ~~37~~33, wherein the control section controls the power section to allocate current whole power to the mobile station making use of the packet data service, in the case where there is the mobile station making use of the packet data service where the current call is in progress when the packet data traffic is generated for the first time.

40. (Original) The power allocation apparatus as claimed in claim 38, wherein the control section controls the power section to allocate current remaining power to the mobile station making use of the packet data service at once, in order to allocate the power to the mobile station making use of the packet data service.

41. (Original) The power allocation apparatus as claimed in claim 39, wherein the control section controls the power section to allocate current remaining power to the mobile station making use of the packet data service at once, in order to allocate the power to the mobile station making use of the packet data service.

42. (Canceled)

43. (Currently Amended) The power allocation apparatus as claimed in claim ~~42~~33, wherein the control section controls the power section by setting the ~~preset period of~~each slot time to 1.25 msec.

44. (Canceled)

45. (Currently Amended) The power allocation apparatus as claimed in claim ~~42~~33, wherein the control section controls the power section to gradually increase the power transmitted to the mobile station making use of the packet data service at each ~~preset period of~~slot time in a way that an increasing width of each step is gradually decreased as the ~~preset~~ period of time proceeds.

46. (Currently Amended) The power allocation apparatus as claimed in claim 45, wherein the control section controls the power section to cause the increasing width to be gradually decreased as the ~~preset~~ period of time proceeds so as for the power transmitted to the mobile station making use of the packet data service to increase in exponential proportion.

47. (Currently Amended) The power allocation apparatus as claimed in claim ~~42~~33, wherein the control section controls the power section to cause the gradually increasing power to

be increased up to a peak power which can be currently transmitted.

48. (Canceled)